

2.2.1 General Technical Specifications

- a. One electronic form, the Ships Change Document (SCD), shall be used to enter data and track progress of changes.
- b. The electronic form will only display information for the current and previous phases.
- c. Users will not be allowed to continue to the next phase without - approval of the current phase.
- d. Each approved and active phase can be printed for use as a working document.
- e. Approvals will be dated and will include the signatures of Ships Program Manager (SPM) and Nuclear Power Directorate (if required).
- f. The SCD will track the dates for approvals, disapprovals or rework decisions by the O-6 board, 1 & 2 Star Board and 3 Star Board as required.
- g. All Points of Contacts identified on the SCD will be notified of change status at each major decision point (i.e. sent for rework, approval, pass to history).
- h. The O-6 board will complete voting within 3 working days after receiving notification that a change is ready for review.
- i. CFT 4 process will be divided into four phases:
 - Preliminary Analysis- determines feasibility of submitted change.
 - Concept Design- develops system performance specifications.
 - Design Development- develops product performance specifications.
 - Ship Integration-develops an installation and testing plan for changes.
- j. Privacy Act and Fairness statement
- k. No classified or NOFORN information is to be entered into form
- l. Submitting activities will provide a list of personnel authorized to submit SCD's.
- m. Submitting activities will be required to ensure continuity by providing a replacement within 2 working days of the original POC's detachment from the submitted ship change document.

- n. The following information will be automatically inserted as a header from the previous SCD phase:
- Change Tracking Number
 - Description of the change (first 250 words)
 - Impact if not accomplished
 - Applicable Ship/Ship Class/Sites
- o. Submitter will be allowed to modify the Applicable Ship/Ship Class/Sites in the header for an active phase.

2.2.2 SCD Phase I Technical Specifications

1. Phase I should be completed as follows:
 - a. **Ship change title (Block 1):** Ship change title will identify the ship change in no more than 40 characters. This title will be used throughout the life of the change and cannot be changed.
 - b. **Applicable ship/ship class/sites (Block 2):** List of all ships, ship classes, and selected shore sites as applicable. The user will also have an option to choose multiple ship classes or shore sites. Shore sites will not include unique requirements. . Drop down menus will be provided as a selection tool for ship and ship classes.
 - c. **Recommended SCD (Block 3):** Identifies the scope, category, duration and funding for the proposed change.

Scope: (Check all that applies)

- ☐ Internal equipment modification
- ☐ Ship modification
- ☐ Site modification - If choosing a shore site the ship change must also be applicable to a ship or ship class.

Category: (Check all that applies)

- ☐ HM&E
- ☐ C4I
- ☐ CS
- ☐ Computer Program/Software

Duration:

- ☐ Permanent

- ❑ Temporary - Temporary Alterations (TEMPALTs) - Alterations that provide new capabilities or improve existing capabilities on a temporary basis (not to exceed one year or one operational deployment in duration). TEMPALTs supports research development, test and evaluation, or military exercise or mission requirements. Note: TEMPALT data package is required.

Funding: (Check all that applies)

- ❑ Program
- ❑ Fleet
- ❑ Joint

d. Block 4,5,6,7 and 8 will have the following format:

- Name: Last Name, First Name
- Activity
- Code
- Phone: xxx-xxx-xxxx
- Email

ALL INFORMATION IS REQUIRED FOR THE BLOCKS BEING FILLED OUT.

- e. **Initiating point of contact (Block 4):** Point of contact is the user entering the idea into SCD phase I. Initiating point of contact may be anyone with NDE access. The SCD will then be forwarded to the submitting point of contact for approval. If the initiator is a designated submitting activity the information can be provide or the N/A block can be checked.
- f. **Submitting point of contact (Block 5):** Point of contact is limited to: TYCOM, PARM/Life Cycle Managers, PEO's, FFC, RMC's or OPNAV. Submitted POC will be responsible and accountable for the all phases of the SCD. They will be the primary POC for questions or clarification throughout the process. Subsequent approvals, disapprovals, and notification to complete the next phase of the SCD will be forwarded to this point of contact.
- g. **PARM point of contact (Block 6):** Point of contact will be the activity associated with completing the engineering, procurement and identification of life-cycle support for the ship change and its associated ship changes. If the PARM is not known, the "TBD" box shall be checked. The PARM will then be identified by the technical assessment team (TAT) during its Phase I assessment.

- h. **Type Commander (TYCOM) point of contact (Block 7):** Point of contact will be the Lead Type Commander associated with the change.
- i. **Technical point of contact (Block 8):** Point of contact as identified by the PARM, TYCOM or TAT. If the technical POC is not known, the "TBD" box shall be checked. The technical POC will then be identified by the technical assessment team (TAT) during its Phase I assessment.
- j. **Description of proposed change (Block 9):** This description provides a brief scope of the proposed change, including alternatives that may have been considered the technical risk, and why the proposed change is preferable. List equipment to be added and/or deleted. Discuss compensation that could be accomplished concurrently with this proposed change, in order to minimize or offset the weight, moment, or space impact of the proposed installation. Discuss interfaces with existing shipboard systems, including functional interfaces (diagrammatic) and physical interfaces. Include references to any other amplifying information or data, if available. The initial paragraph of the description shall be an executive summary (no more than 250 words). This executive summary will be used as the short description throughout the entitled process.
- k. **Impact if not accomplished (Block 10):** Addresses the impact (no more than 250 words) to equipment, system, ship, site, or fleet readiness if the ship change is not accomplished.
- l. **Requirement and justification of proposed change (Block 11):** Submitter is to check all applicable boxes requiring the change and note requirements, deficiencies or explanations as requested.
 - ❑ **Statutory Requirement-** Cite requirement.
 - ❑ **Legislated Regulatory Requirement** - Cite Legislation Requirement.
 - ❑ **Environmental Requirement-** Cite requirement
 - ❑ **Proposed Military Improvement (PMI)** - Approved/directed by OPNAV and are intended to increase the ship's ability to meet its Required Operational Capability (ROC). Cite Rationale: Enter the system/equipment level Operational Requirements Documents.
 - ❑ **Proposed Survivability Improvement (PSI)** - Approved/directed by OPNAV, and are intended to reduce the ship's susceptibility to defined threats, or to increase the ability to recover from damage. Cite Requirement.

- ☐ **Reduction of Total Ownership Costs (R-TOC)** - This block shall only be checked when the primary purpose of the change proposal is R-TOC. These initiatives address longstanding concerns about the adverse impact of defense budgetary and operational trends on force structure and readiness. Department of Defense (DOD) has directed Program Managers to achieve specific R-TOC goals in their programs. ROI and Payback Period will be calculated in NDE using data provided in the Cost Benefit Analysis (CBA) forms.
- ☐ **Battle Force Interoperability (BFI)**- Cite Requirement
- ☐ **Safety** - Item changes are required to eliminate hazards to ship personnel or components as officially documented by impact statement provided in block 10.
- ☐ **Mandatory Safety** - If safety analysis has been accomplished, cite reference.
- ☐ **QOL/QOS**- Quality of life and quality of service. Cite reference as applicable.
- ☐ **Restoring Margins** - Restoring system capacity (weight and kilogram (kg); electrical system; heating, ventilation and air conditioning; etc). Explanation: Provide an explanation.
- ☐ **Contract Defect** - Address correction of defective specifications, unavailable Government Furnished Equipment (GFE), or unavailable Government Furnished Information (GFI). Cite Requirement: Enter contract number, CLIN, and problem to be corrected.
- ☐ **Unavailable, Obsolete or Unreliable Equipment** - Changes that replace equipment or components no longer available or supportable.
- ☐ **Testing and Trial Deficiency** - Testing and trial deficiencies address component or system modifications derived from deficiencies noted during developmental or operational testing.
- ☐ **Top Management Attention/Top Management Interest (TMA/TMI)** - Indicate whether or not this change is a TMA/TMI item and include number.
- ☐ **Aviation Capability and Air Wing Compatibility**
- ☐ **Anti-Terrorism/Force Protection**
- ☐ **Other (Specify)** - Enter any other requirement not specified above.
- ☐ **Need/Purpose Narrative** - Text box used to cite references as required above.

m. **Distributive systems/other impacts (Block 12):** Identify yes/no whether the elements listed will be affected or changed (Check all

that apply). No additional information is required for this phase. Definitions of items in this block may be found in the glossary. At least one block must be checked.

	Yes	No
AC Plants/Chilled Water		
Electric Generation and Power Distribution Systems		
Topside Design/Mast Structure		
Fiber Optic Cable Plant		
Firemain		
Weight & Moment Change		
IC Switchboard & Database Multiplex System		
Electrical (400 Hz)		
Potable Water		
Fuel System		
Air Systems		
Networks		
IC Circuits		
HVAC		
Ships Characteristics Document change required		
Ship/Aviation Integration		
Storage Requirements		
Dry Docking Required		
Certification Required		
SUBSAFE		
Space Configuration		
Damage Control		
Software		
Weapons Systems		
Human Systems Integration (HSI)		
Hangar Bay/Flight Deck Encroachment		
Integrated Logistics Support (ILS)		
Prior/Concurrent/Conjunctive Alts		
Ordnance Handling/Storage		
Other (Systems/Equipment/Sites):		

- n. **Alteration Figure of Merit (AFOM) information (Block 13):** Includes a list of the 61 Naval Capabilities as outlined in the NAVAL POWER 21 Transformation Roadmap. Submitter will select one or more of the applicable Naval Capabilities IAW the definitions provided in the glossary (provided as a separate document).

- I. If no Naval Capabilities are selected, NDE will provide the following alert "You must select at least one Naval Capability; for HM&E systems select a capability under SEA Base"

Once the SCD is complete and the preparer selects 'submit' or "send", NDE will provide the following prompt wrt AFOM "Are all references and or links to references provided in the comment block for TYCOM Reference and Assessment?" with a Yes/No select button; if No, the TYCOM may enter data, if YES, the SCD is locked from further manipulation until the next phase

- ❑ All Eleven Suitability Rating Scales will be embedded into the SCD under this section. Write permission will be given to the Technical Assessment Team (TAT) and TYCOM Points of Contact. View permission will be given to the submitter.
 - ❑ The TAT will enter the suggested ratings under the Suitability scales; an "Accept" and "Reject" button will be provided by each scale for the TYCOM POC to provide a final assessment on the suggested scale. If "Reject" is selected by the TYCOM POC, NDE will prompt the TYCOM with the following alert "Please select a new index". Once the index is selected, the option to "Accept" or "Reject" will be provided again for each scale.
 - ❑ The Naval Capabilities that are selected in Phase I will remain selected for Phase II. The submitter may change these selections in Phase II or III, but a prompt shall be provided that states "Are you sure you wish to change the selected Naval Capabilities?" with a "yes"/"no" select button.
 - ❑ Selected capabilities may not be changed once the SCD is submitted and/or assessed by the TYCOM.
 - ❑ TYCOM POCs are defined as COMNAVSURFOR, COMNAVAIRFOR and NAVNETWARCOM N6 and N43 codes (final codes TBD).
- o. **Cost Benefit Analysis information (Block 14):** Provide the Concept Development Cost information
- p. **Approval Recommendations (Block 15):** Provides the required outputs for the TAT assessment, the electronic signature of the Ships Program Manager (SPM) and the Nuclear power directorate (as required).

2.2.3 SCD Phase II Technical Specifications

1. SCD Phase II should be completed as follows:
 - a. **List of applicable(s) ships within 5-year decommissioning window (Block 1):** Identify associated ships that will decommission within 5 years. Identified ships will require an Assistant Secretary of the Navy (ASN) waiver to proceed.
 - b. **Distributive systems impact (Block 2):** Submitter shall check appropriate box for each distributed system.

	Net Increase	Net Decrease	No Net Impact	Unknown
AC Plants/Chilled Water				
Electric Generation and Power Distribution Systems				
Topside Design/Mast Structure				

Fiber Optic Cable Plant				
Firemain				
Weight & Moment Change				
IC Switchboard & Database Multiplex System				

- c. **Other considerations (Block 3):** Submitter is to indicate (Y/N) whether or not accomplishment of the change is an impact. If yes, provide details (no more than 100 words) of the impact. Must include explanation for any system that was checked yes or incorrectly noted in Phase I.

Topside: Yes No

Explanation:

Ship Characteristics Document change required: Yes No

Explanation:

Ship/Aviation Integration Impact: Yes No

Explanation:

Storage Requirements: Yes No

Explanation:

Dry Docking Required: Yes No

Explanation:

Certification Required: Yes No

Explanation (include responsible activity):

SUBSAFE Impact: Yes No

Explanation:

Network Impact: Yes No

Explanation:

Fuel System Impact: Yes No

Explanation:

IC Circuits Impact: Yes No

Explanation:

MCS/DCS Impact: Yes No

Explanation:

Software Impact: Yes No

Explanation:

Weapons Systems Impact: Yes No

Explanation:

Space Configuration: Yes No

Explanation:

Hangar Bay/Flight Deck Impact: Yes No

Explanation:

Air Systems: Yes No

Explanation:

Ordnance Handling/Storage: Yes No

Explanation:

Other: List other system that may be impacted but not previously noted.
Explanation:

d. **Shock, vibration and electromagnetic interference (EMI) requirements (Block 4):**

Shock Grade IAW GSO Section 072(check one)

A___ B___ C___ N/A___

Note: A - For Vital Systems/Equipment; Must Function After Shock Event

B - In Spaces Manned at GQ, Housing A Level Equipment, Cannot be a Hazard (Missile, Electrical, Hazardous material (HAZMAT), Structures on Mast/Island B Minimum

C - Any category not previously defined

Compliant with MIL-STD-167 -1, Vibration Requirements (check one):

Yes___ No___ N/A___

Note: MIL-STD-167-1, covers Reciprocating Machinery and Propulsion system and Shafting, is a NOFORN document.

Compliant with MIL-STD-461E EMI Requirements (check one):

Yes___ No___ N/A___

Compliant with MIL-STD-464 EMI Requirements (check one):

Yes___ No___ Tailored (specifics appended___ N/A___

Note: TS-9090-210B VOLUME 2 SL720-AA-MAN-020 8/15/2003
Revision 2, Change 18

Compliant with OPNAVINST-2400.20E RF Spectrum Management Requirements (check one):

Yes___ No___ N/A___

Note: OPNAV Instruction 2400.20E is the Navy Management of the Radio Frequency Spectrum.

Compliant with HERO/HERP/HERF Requirements (check one):

Yes___ No___ N/A___

Note: DoDINST 6055.11 and OP 3565 Volume I.

Remarks: Provide additional information not annotated previously.

- e. **Integrated logistics support (ILS) impacts (Block 5):** The Submitter is to check all boxes where installation of this alteration will affect the following Integrated Logistics Support (ILS) elements.
- ☐ Technical Manuals
 - ☐ Provisioning
 - ☐ Planned Maintenance System (PMS)
 - ☐ Training/Personnel Qualification Standards (PQS)
 - ☐ Ship's Selected Records (Drawings & Manuals)
 - ☐ Operating Sequencing Systems (OSS)
 - ☐ Steam Plant Manual (SPM)
 - ☐ Test Equipment
 - ☐ Software Management
 - ☐ Specify software support activity:
 - ☐ Spares Affected (Includes MAMs)
 - ☐ Specify responsible activity:
 - ☐ COTS/NDI
 - ☐ Other (Specify)
- f. **Human systems integration (HSI) impacts (Block 6):** Provide expected areas of Human Systems Integration (HSI) impact on Sailor Performance, Safety and Personnel Survivability as can currently be determined. Include any planned analysis such as HFE tradeoffs, manning or workload analysis, usability testing etc. The questions to be addressed are: Does the preliminary design take full advantage of the benefits of Human Systems Integration? Have Hardware, Software, and People been integrated into an efficiently operating Total System? Refer to DODI 5000.2 for more detailed requirements on HSI planning. Specific areas of input and representative questions are as follows:

Manpower /Workload Impact: Yes / No / Not Determined
 Brief Description: (Is proposed change likely to impact workload or manpower? Will change require task/workload/manpower analysis?)

Personnel Impact: Yes / No / Not Determined
 Brief Description: (Is change expected to require new or unusual personnel specialties?)

Training Impact: Yes / No / Not Determined
 Brief Description: (Does change incorporate or integrate new training concepts? Does training currently exist?)

Human Factors Engineering (HFE): Yes / No / Not Determined

Brief Description: (Will change minimize excessive cognitive, physical skills and human errors?)

Habitability: Yes / No / Not Determined

Brief Description: (Identify if change will have positive and/or negative impacts on shipboard habitability, QOL or QOS)

Environment, Safety and Occupational Health (ESOH):

Yes / No / Not Determined

Brief Description: (Will change reduce or add to shipboard safety and health such as reduction/addition of HAZMAT?)

Personnel Survivability: Yes / No / Not Determined

Brief Description: (Will change impact on fratricide, CBR, or damage control procedures?)

- g. **Critical Material (Block 7):** This data field will allow for the configuration identification of the Hardware Systems Command (HSC) material to be installed. The items listed in this field should be the same as those that will be listed in the P1 funding line in NDE.
- h. **Prior or concurrent change accomplishment (Block 8):** The submitter is to list any prior or concurrent changes required for this ship change.
- i. **Expanded Ship Work Breakdown Structure (ESWBS) (Block 9):** The Submitter is to enter one ESWBS Number selected from NAVSEA S9040-SWAB-IDX-010/SWBS 5D, which is most closely associated with the system, component or structure being impacted by the alteration. This ESWBS is to be to the 5th level (ex. 15092).
- j. **Detail Design Criteria (Block 10):** The Submitter checks all applicable boxes noting the design criteria to be used for the change.
 - ☐ Ship Specification- The shipbuilding contract specifications for a particular ship.
 - ☐ Deep Diving General Overhaul Specification- The contract specification for a particular ship.
 - ☐ Other (Specify) - Enter any design criteria to be used that is not addressed above.
- k. **Prototype Required (Block 11):** The purpose of proofing is to ascertain that the intended purpose of the alteration is satisfied and to identify any deficiencies so that immediate corrective action can be initiated for the first time installation to preclude a repeat of the same problems on subsequent installations. If Proofing is required then the SAR Approver must enter the activity assigned to do the proofing in this field.

- l. **Alteration Figure of Merit (AFOM) information (Block 12):** Same definition as provided in Phase I question 13.
- m. **Cost Benefit Analysis information (Block 13):**
- n. **Approval Recommendations (Block 14):** Provides the required outputs for the TAT assessment, the electronic signature of the Ships Program Manager (SPM) and the Nuclear power directorate (as required).

2.2.3 SCD Phase III Technical Specifications

1. All blocks in the SCD Phase 3 should be completed as follows: (In the blocks where no information is available or required, N/A or none should be entered.)

- a. **System/Equipment Designation (Block 1):**
- b. **Model No. (Block 2):**
- c. **Cage Code (Block 3):**
- d. **Detailed Description of Change (Block 4):** The Description field shall provide a brief description of the alteration to the extent necessary to begin detailed design. The description of the alteration shall indicate the spaces, systems and equipment impacted by the alteration and the extent of the impact. The description shall specifically address equipment to be added (Government or installing activity furnished) and/or deleted and the impact (increase or decrease) on power (steam generation, electrical generation and/or distribution systems), fluids (water, hydraulic, dry air, lubricating oil, fuel oil, etc.), compressed gasses (oxygen, nitrogen, etc.), firemain, ship's structure, interior communications circuits, habitability/accommodations, stowage, heating, ventilation and air conditioning. The description shall also specifically address, by space name and compartment number, any impact (increase or decrease) in weight and heat dissipation. Alterations impacting SUBSAFE systems or equipment as defined in NAVSEA 0924-062-0010 (SUBSAFE Manual) shall include in the description field a statement identifying the systems and equipment as SUBSAFE. An explanation of how the SUBSAFE boundaries are impacted and how the SUBSAFE integrity will be maintained shall also be included in this field. Mandatory

locations and interface requirements shall be supported by sketches and/or referenced documentation.

The description shall be detailed enough to be used as a starting point for detailed design but need not be to the specific pipe/duct/cable level except in instances where this information is critical to the installation. Also, information as to equipment installation location should be detailed to an area of a compartment, not to a specific frame number or distance from the centerline, unless this level of detail is critical to the accomplishment of the change. If required, a separate Guidance Document shall be referenced which provides a detailed description of the change. The description of the change shall indicate the spaces, systems and equipment impacted and the extent of the impact. The description shall specifically address equipment to be added and/or deleted. The description shall also specifically address, by space name and compartment number.

- e. **Distributive Systems Impact (Block 5):** Describe impacts on systems not detailed in the distributive systems impact section: power (steam generation, electrical generation and/or distribution systems), fluids (water, hydraulic, dry air, lubricating oil, fuel oil, etc.), compressed gasses (oxygen, nitrogen, etc.), ship's structure, air systems, and interior communications circuits.

	Added	Removed
A/C Plants / Chilled Water Dist (Tons A/C)		
(CHW GPM)		
Electrical Generation and Power Dist Sys (kW)		
Topside Design / Mast Structure (Weight in Tons)		
Fiber Optic Cable Plant (Yes / No)		
Firemain (GPM)		
Ship's Stability (Weight in Tons)		
IC SWBD and Database Multiplex Sys (Loads)		

- f. **Is there References/Supporting Documentation in addition to the Standard Requirements? (Block 6):**
- g. **Estimated Weight and Moment (Block 7):** The Weight and Moment Impact field shall provide an estimate of any weight and moment change caused by the SHIPALT (increase or decrease), including loads (ammunitions, provisions, stores, fuel oil, water, etc.). Weight shall be estimated to the nearest +/- 0.1 ton (the term "Negligible" shall not be used for the weight estimate); Vertical Center of Gravity (VCG) to the nearest foot, Longitudinal Center of Gravity (LCG) to the nearest foot forward or aft of the mid perpendicular of the ship,

and the Transverse Center of Gravity (TCG) to the nearest foot port or starboard of the centerline. If the SHIPALT includes modification to a hull form or an appendage (bilge keel, sonar dome, etc.), a buoyancy impact of the weight of the displaced water volume shall also be estimated to the nearest +/- 0.1 ton.

WEIGHT	VCG	LCG	TCG
Stability Statement			

h. Change Material/Software List (Block 8):

ITEM NO.	DESCRIPTION	UNIT OF ISSUE	QUANTITY	PROCURING ACTIVITY

- i. **Are there Quality Assurance Requirements in addition to the Standard Requirements? (Block 9):** The Quality Assurance field shall identify any special quality assurance requirements, which must be used to assure successful accomplishment of the change. Applicable testing that is required shall be specifically addressed (e.g., requirement to adjust firing cams, conduct Structural Test Firings (STF), testing in accordance with GSO and NSTMs etc.) Only unique requirements should be listed.
- j. **Special Disposition Requirements for Removed Material (Block 10):** This field will contain a list of all removed material requiring special disposition, the disposition required and assignment of responsible activity.

MATERIAL	DISPOSITION

- k. **Installation Support and Test Equipment (Block 11):** This field will list all the Support and Test Equipment (S&TE) that is required to support the installation of the alteration (Jigs, Alignment, I/D level TE) (The S&TE required for ships force to trouble-shoot and maintain the equipment is listed in the ILS Cert).

- l. **Shipboard Stowage Details (Block 12):** This field is an indication (Y/N) whether or not installation of this alteration will require any use of shipboard Stowage.
- m. **NAVSEA ship Installation Drawing (SID) Review Required (Block 12):**
The Submitter shall indicate Yes or No if NAVSEA should review the initial SID Package.
- n. **Special Industrial Stowage Requirements (Block 13):** This field will list all special stowage requirements at the industrial activity installing the change. This section should include but not be limited to requirements such as environmental or security stowage.
- o. **Required Prior, Conjunctive, or Concurrent Changes (Block 14):**
- p. **Other Systems Impacts (Block 15):**
- q. **Installation Duration (Block 16):**
- r. **Human Systems Integration (HSI) (Block 17):** Provide information on incorporation of the applicable aspects of Human Systems Integration (HSI) and the impact on Sailor Performance. The questions to be addressed are: Do the design specifications support effective implementation of Human Systems Integration? Will the modified systems be usable, enhance Sailor Performance, optimize manpower and training, and promote safety and personnel survivability when delivered to the Fleet? Refer to DODI 5000.2 for more detailed requirements on HSI. Specific areas of input and representative questions are as follows:
 - Manpower /Workload Impact:** Yes / No
Brief Description: (Does the Alt impact workload or manpower?)
 - Personnel Impact:** Yes / No
Brief Description: (Does the change require new or unusual personnel specialties?)
 - Training Impact:** Yes / No
Brief Description: (Does change incorporate or integrate new training concepts? Does training currently exist?)
 - Human Factors Engineering (HFE):** Yes / No
Brief Description: (Does the change minimize excessive cognitive, physical skills and human errors?)
 - Habitability:** Yes / No
Brief Description: (Does the change have positive and/or negative impacts on shipboard habitability, QOL or QOS)
 - Environment, Safety and Occupational Health (ESOH):** Yes / No

Brief Description: (Will the change reduce or add to shipboard safety and health such as reduction/addition of HAZMAT?)

Personnel Survivability: Yes / No

Brief Description: (Will the change impact on fratricide CBR, or damage control procedures?)

- s. **Certifications/Qualifications required (Block 18):** The certifications will be performed and date noted as required. If the certification is scheduled, a date will be provided for completion.
- t. **Cost Benefit Analysis information (Block 19):**
- u. **Alteration Figure of Merit (AFOM) information (Block 20):** Same definition as provided in Phase I question 13.
- v. **Approval Recommendations (Block 21):** Provides the required outputs for the TAT assessment, the electronic signature of the Ships Program Manager (SPM) and the Nuclear power directorate (as required).